

Title (en)

PROCESS PLANT WITH FLEXIBLE HEAT INTEGRATION SCHEME

Title (de)

PROZESSANLAGE MIT FLEXIBLEM WÄRMEINTEGRATIONSSCHEMA

Title (fr)

INSTALLATION DE TRAITEMENT AVEC SCHÉMA D'INTÉGRATION DE CHALEUR FLEXIBLE

Publication

**EP 4324561 A1 20240221 (EN)**

Application

**EP 22190699 A 20220817**

Priority

EP 22190699 A 20220817

Abstract (en)

A thermal configuration for use during sulfidation and operation is disclosed which may involve multiple of the following heating steps, (a) heating a process feed by a charge heater, heating (b) a process feed stream or a recycle oil stream by heat exchange with a process effluent, heating (c) a process feed stream or a recycle oil stream by heat exchange with a said process feed after having been heated in the charge heater. Furthermore, the steps may be made independent by controlling the ratio of the streams directed to (b) or (c), controlling an amount of feed stream or recycle oil stream by-passed around the heating of (b) or (c) and controlling the temperature of step (a).

IPC 8 full level

**B01J 37/20** (2006.01); **B01J 8/04** (2006.01); **C10G 45/02** (2006.01); **C10G 45/32** (2006.01); **C10G 45/72** (2006.01)

CPC (source: EP)

**B01J 8/0457** (2013.01); **B01J 8/0496** (2013.01); **B01J 37/20** (2013.01); **C10G 1/002** (2013.01); **C10G 3/44** (2013.01); **C10G 3/50** (2013.01); **C10G 3/54** (2013.01); **C10G 45/32** (2013.01); **C10G 49/00** (2013.01); **C10G 49/26** (2013.01); **C10G 1/02** (2013.01); **C10G 1/10** (2013.01)

Citation (search report)

- [X] US 3979183 A 19760907 - SCOTT NORMAN H
- [A] CN 104338565 A 20150211 - PETROCHINA CO LTD, et al
- [A] WO 2015140319 A1 20150924 - HALDOR TOPSOE AS [DK]
- [A] CN 204369817 U 20150603 - PETROCHINA CO LTD, et al

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

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DOCDB simple family (application)

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